



PROJECT DETAILS: Weld County, CO NAD 83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level
Local North: True

Project: Weld County, CO NAD 83
Site: Critter Creek 17 SW Pad
Well: Critter Creek 17-6104D
Wellbore: OH
Design: Plan 1



Azimuths to True North
Magnetic North: 8.32°

Magnetic Field
Strength: 52747.9snT
Dip Angle: 67.18°
Date: 6/25/2018
Model: HDGM



Plan: Plan 1 (Critter Creek 17-6104D/OH)

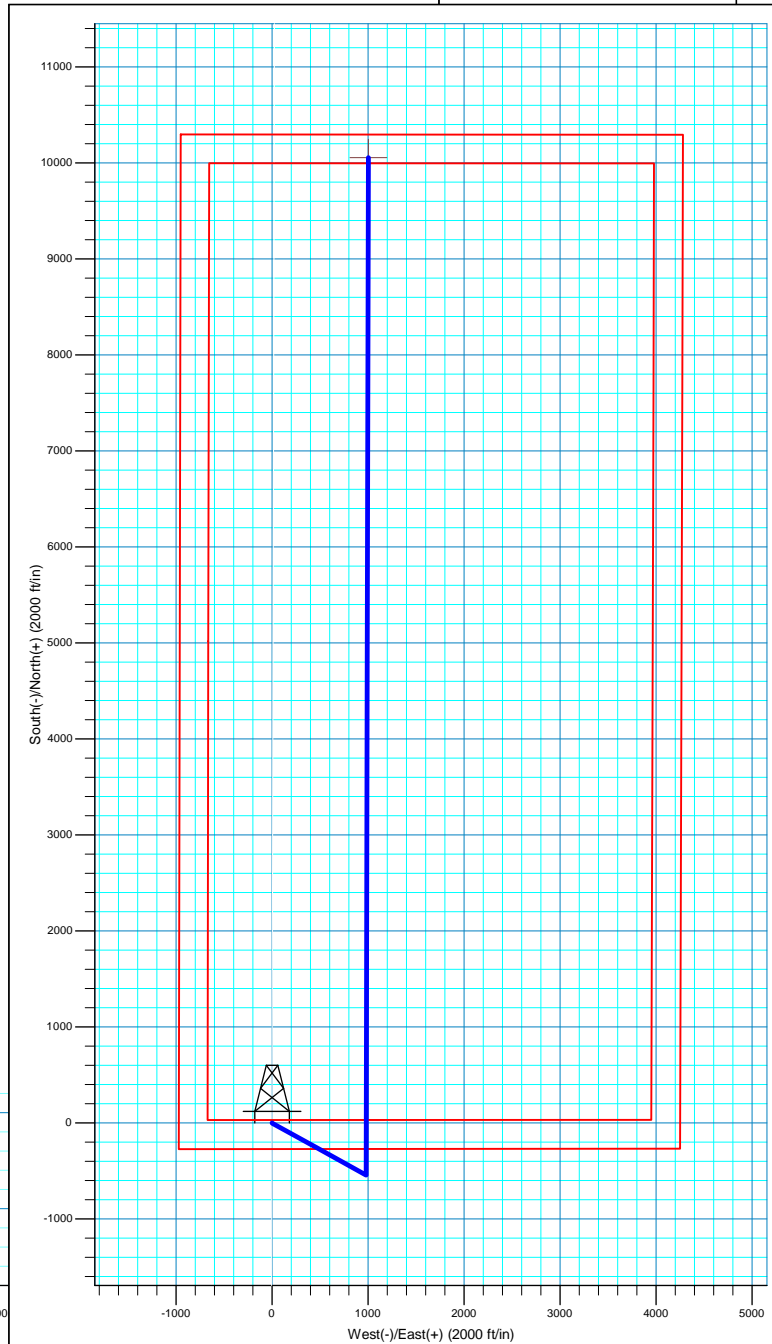
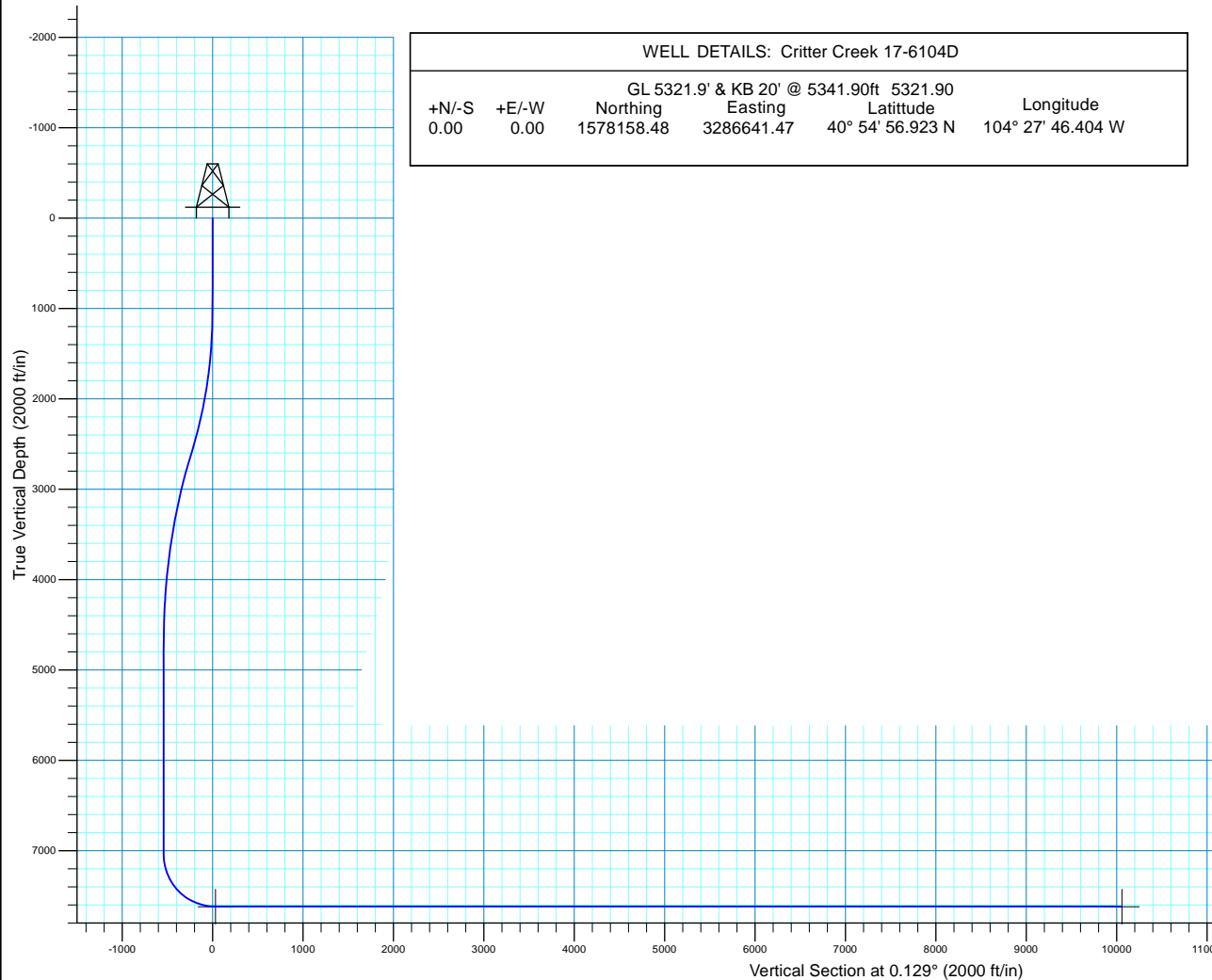
Created By: Seth Burstad

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
1000.00	0.00	0.000	1000.00	0.00	0.00	0.00	0.00	0.00
2557.85	31.16	118.976	2482.20	-200.19	361.51	2.00	118.98	-199.38
2857.95	31.16	118.976	2739.01	-275.41	497.34	0.00	0.00	-274.29
4935.08	0.00	0.000	4715.27	-542.33	979.35	1.50	180.00	-540.12
7266.85	0.00	0.000	7047.04	-542.33	979.35	0.00	0.00	-540.12
8166.85	90.00	0.129	7620.00	30.63	980.64	10.00	0.13	32.83
18192.86	90.00	0.129	7620.00	10056.62	1003.17	0.00	0.00	10058.85

WELL DETAILS: Critter Creek 17-6104D

GL 5321.9' & KB 20' @ 5341.90ft 5321.90					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1578158.48	3286641.47	40° 54' 56.923 N	104° 27' 46.404 W





HighPoint Resources

Weld County, CO NAD 83
Crittter Creek 17 SW Pad
Crittter Creek 17-6104D

OH

Plan: Plan 1

Standard Planning Report

25 June, 2018



Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 17-6104D
Company:	HighPoint Resources	TVD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Site:	Critter Creek 17 SW Pad	North Reference:	True
Well:	Critter Creek 17-6104D	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Project	Weld County, CO NAD 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Critter Creek 17 SW Pad, Site Center : Critter Creek 17-6401B			
Site Position:		Northing:	1,578,157.79 usft	Latitude:	40° 54' 56.923 N
From:	Lat/Long	Easting:	3,286,581.50 usft	Longitude:	104° 27' 47.185 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.67 °

Well	Critter Creek 17-6104D, 270' FSL 972' FWL Sec 17 T11N R63W					
Well Position	+N/-S	-0.02 ft	Northing:	1,578,158.48 usft	Latitude:	40° 54' 56.923 N
	+E/-W	59.98 ft	Easting:	3,286,641.48 usft	Longitude:	104° 27' 46.404 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,321.90 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/25/2018	8.32	67.18	52,748

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	0.129

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,557.85	31.16	118.976	2,482.20	-200.19	361.51	2.00	2.00	0.00	118.98	
2,857.95	31.16	118.976	2,739.01	-275.41	497.34	0.00	0.00	0.00	0.00	
4,935.08	0.00	0.000	4,715.27	-542.33	979.35	1.50	-1.50	0.00	180.00	
7,266.85	0.00	0.000	7,047.04	-542.33	979.35	0.00	0.00	0.00	0.00	
8,166.85	90.00	0.129	7,620.00	30.63	980.64	10.00	10.00	0.01	0.13	
18,192.86	90.00	0.129	7,620.00	10,056.61	1,003.17	0.00	0.00	0.00	0.00	Critter Creek 17-6104

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 17-6104D
Company:	HighPoint Resources	TVD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Site:	Critter Creek 17 SW Pad	North Reference:	True
Well:	Critter Creek 17-6104D	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.000	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.000	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.000	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,100.00	2.00	118.976	1,099.98	-0.85	1.53	-0.84	2.00	2.00	0.00
1,200.00	4.00	118.976	1,199.84	-3.38	6.10	-3.37	2.00	2.00	0.00
1,300.00	6.00	118.976	1,299.45	-7.60	13.73	-7.57	2.00	2.00	0.00
1,400.00	8.00	118.976	1,398.70	-13.51	24.39	-13.45	2.00	2.00	0.00
1,500.00	10.00	118.976	1,497.47	-21.08	38.07	-21.00	2.00	2.00	0.00
1,600.00	12.00	118.976	1,595.62	-30.33	54.77	-30.20	2.00	2.00	0.00
1,700.00	14.00	118.976	1,693.06	-41.22	74.44	-41.06	2.00	2.00	0.00
1,800.00	16.00	118.976	1,789.64	-53.76	97.09	-53.54	2.00	2.00	0.00
1,900.00	18.00	118.976	1,885.27	-67.93	122.66	-67.65	2.00	2.00	0.00
2,000.00	20.00	118.976	1,979.82	-83.70	151.14	-83.36	2.00	2.00	0.00
2,100.00	22.00	118.976	2,073.17	-101.06	182.49	-100.65	2.00	2.00	0.00
2,200.00	24.00	118.976	2,165.21	-119.98	216.67	-119.50	2.00	2.00	0.00
2,300.00	26.00	118.976	2,255.84	-140.46	253.64	-139.89	2.00	2.00	0.00
2,400.00	28.00	118.976	2,344.94	-162.45	293.35	-161.79	2.00	2.00	0.00
2,500.00	30.00	118.976	2,432.39	-185.93	335.76	-185.18	2.00	2.00	0.00
2,557.85	31.16	118.976	2,482.20	-200.19	361.51	-199.38	2.00	2.00	0.00
Start 300.10 hold at 2557.85 MD									
2,600.00	31.16	118.976	2,518.27	-210.76	380.59	-209.90	0.00	0.00	0.00
2,700.00	31.16	118.976	2,603.84	-235.82	425.85	-234.86	0.00	0.00	0.00
2,800.00	31.16	118.976	2,689.42	-260.88	471.11	-259.82	0.00	0.00	0.00
2,857.95	31.16	118.976	2,739.01	-275.41	497.34	-274.29	0.00	0.00	0.00
Start Drop -1.50									
2,900.00	30.53	118.976	2,775.11	-285.85	516.20	-284.69	1.50	-1.50	0.00
3,000.00	29.03	118.976	2,861.91	-309.91	559.64	-308.65	1.50	-1.50	0.00
3,100.00	27.53	118.976	2,949.97	-332.86	601.08	-331.51	1.50	-1.50	0.00
3,200.00	26.03	118.976	3,039.25	-354.68	640.49	-353.24	1.50	-1.50	0.00
3,300.00	24.53	118.976	3,129.67	-375.37	677.85	-373.84	1.50	-1.50	0.00
3,400.00	23.03	118.976	3,221.18	-394.90	713.11	-393.29	1.50	-1.50	0.00
3,500.00	21.53	118.976	3,313.72	-413.26	746.28	-411.58	1.50	-1.50	0.00
3,600.00	20.03	118.976	3,407.21	-430.45	777.31	-428.69	1.50	-1.50	0.00
3,700.00	18.53	118.976	3,501.60	-446.44	806.19	-444.62	1.50	-1.50	0.00
3,800.00	17.03	118.976	3,596.82	-461.23	832.89	-459.35	1.50	-1.50	0.00
3,900.00	15.53	118.976	3,692.81	-474.80	857.41	-472.87	1.50	-1.50	0.00
4,000.00	14.03	118.976	3,789.50	-487.16	879.72	-485.18	1.50	-1.50	0.00
4,100.00	12.53	118.976	3,886.83	-498.28	899.81	-496.26	1.50	-1.50	0.00
4,200.00	11.03	118.976	3,984.72	-508.17	917.66	-506.10	1.50	-1.50	0.00
4,300.00	9.53	118.976	4,083.11	-516.81	933.27	-514.71	1.50	-1.50	0.00
4,400.00	8.03	118.976	4,181.94	-524.20	946.62	-522.07	1.50	-1.50	0.00
4,500.00	6.53	118.976	4,281.13	-530.34	957.70	-528.18	1.50	-1.50	0.00
4,600.00	5.03	118.976	4,380.62	-535.21	966.50	-533.04	1.50	-1.50	0.00
4,700.00	3.53	118.976	4,480.34	-538.83	973.02	-536.63	1.50	-1.50	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 17-6104D
Company:	HighPoint Resources	TVD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Site:	Critter Creek 17 SW Pad	North Reference:	True
Well:	Critter Creek 17-6104D	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,800.00	2.03	118.976	4,580.22	-541.17	977.26	-538.97	1.50	-1.50	0.00
4,900.00	0.53	118.976	4,680.19	-542.25	979.21	-540.05	1.50	-1.50	0.00
4,935.08	0.00	0.000	4,715.27	-542.33	979.35	-540.12	1.50	-1.50	0.00
Start 2331.77 hold at 4935.08 MD									
5,000.00	0.00	0.000	4,780.19	-542.33	979.35	-540.12	0.00	0.00	0.00
5,100.00	0.00	0.000	4,880.19	-542.33	979.35	-540.12	0.00	0.00	0.00
5,200.00	0.00	0.000	4,980.19	-542.33	979.35	-540.12	0.00	0.00	0.00
5,300.00	0.00	0.000	5,080.19	-542.33	979.35	-540.12	0.00	0.00	0.00
5,400.00	0.00	0.000	5,180.19	-542.33	979.35	-540.12	0.00	0.00	0.00
5,500.00	0.00	0.000	5,280.19	-542.33	979.35	-540.12	0.00	0.00	0.00
5,600.00	0.00	0.000	5,380.19	-542.33	979.35	-540.12	0.00	0.00	0.00
5,700.00	0.00	0.000	5,480.19	-542.33	979.35	-540.12	0.00	0.00	0.00
5,800.00	0.00	0.000	5,580.19	-542.33	979.35	-540.12	0.00	0.00	0.00
5,900.00	0.00	0.000	5,680.19	-542.33	979.35	-540.12	0.00	0.00	0.00
6,000.00	0.00	0.000	5,780.19	-542.33	979.35	-540.12	0.00	0.00	0.00
6,100.00	0.00	0.000	5,880.19	-542.33	979.35	-540.12	0.00	0.00	0.00
6,200.00	0.00	0.000	5,980.19	-542.33	979.35	-540.12	0.00	0.00	0.00
6,300.00	0.00	0.000	6,080.19	-542.33	979.35	-540.12	0.00	0.00	0.00
6,400.00	0.00	0.000	6,180.19	-542.33	979.35	-540.12	0.00	0.00	0.00
6,500.00	0.00	0.000	6,280.19	-542.33	979.35	-540.12	0.00	0.00	0.00
6,600.00	0.00	0.000	6,380.19	-542.33	979.35	-540.12	0.00	0.00	0.00
6,700.00	0.00	0.000	6,480.19	-542.33	979.35	-540.12	0.00	0.00	0.00
6,800.00	0.00	0.000	6,580.19	-542.33	979.35	-540.12	0.00	0.00	0.00
6,900.00	0.00	0.000	6,680.19	-542.33	979.35	-540.12	0.00	0.00	0.00
7,000.00	0.00	0.000	6,780.19	-542.33	979.35	-540.12	0.00	0.00	0.00
7,100.00	0.00	0.000	6,880.19	-542.33	979.35	-540.12	0.00	0.00	0.00
7,200.00	0.00	0.000	6,980.19	-542.33	979.35	-540.12	0.00	0.00	0.00
7,266.85	0.00	0.000	7,047.04	-542.33	979.35	-540.12	0.00	0.00	0.00
Start DLS 10.00 TFO 0.13									
7,300.00	3.32	0.129	7,080.17	-541.37	979.35	-539.16	10.00	10.00	0.00
7,400.00	13.32	0.129	7,179.00	-526.93	979.38	-524.72	10.00	10.00	0.00
7,500.00	23.32	0.129	7,273.81	-495.54	979.46	-493.34	10.00	10.00	0.00
7,600.00	33.32	0.129	7,361.73	-448.17	979.56	-445.96	10.00	10.00	0.00
7,700.00	43.32	0.129	7,440.10	-386.25	979.70	-384.04	10.00	10.00	0.00
7,800.00	53.32	0.129	7,506.51	-311.66	979.87	-309.46	10.00	10.00	0.00
7,900.00	63.32	0.129	7,558.97	-226.68	980.06	-224.47	10.00	10.00	0.00
8,000.00	73.32	0.129	7,595.88	-133.87	980.27	-131.67	10.00	10.00	0.00
8,100.00	83.32	0.129	7,616.10	-36.07	980.49	-33.86	10.00	10.00	0.00
8,166.85	90.00	0.129	7,620.00	30.63	980.64	32.83	10.00	10.00	0.00
Start 10026.00 hold at 8166.85 MD									
8,200.00	90.00	0.129	7,620.00	63.78	980.71	65.99	0.00	0.00	0.00
8,300.00	90.00	0.129	7,620.00	163.78	980.94	165.99	0.00	0.00	0.00
8,400.00	90.00	0.129	7,620.00	263.78	981.16	265.99	0.00	0.00	0.00
8,500.00	90.00	0.129	7,620.00	363.78	981.39	365.99	0.00	0.00	0.00
8,600.00	90.00	0.129	7,620.00	463.78	981.61	465.99	0.00	0.00	0.00
8,700.00	90.00	0.129	7,620.00	563.78	981.84	565.99	0.00	0.00	0.00
8,800.00	90.00	0.129	7,620.00	663.78	982.06	665.99	0.00	0.00	0.00
8,900.00	90.00	0.129	7,620.00	763.78	982.28	765.99	0.00	0.00	0.00
9,000.00	90.00	0.129	7,620.00	863.78	982.51	865.99	0.00	0.00	0.00
9,100.00	90.00	0.129	7,620.00	963.78	982.73	965.99	0.00	0.00	0.00
9,200.00	90.00	0.129	7,620.00	1,063.78	982.96	1,065.99	0.00	0.00	0.00
9,300.00	90.00	0.129	7,620.00	1,163.78	983.18	1,165.99	0.00	0.00	0.00
9,400.00	90.00	0.129	7,620.00	1,263.78	983.41	1,265.99	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 17-6104D
Company:	HighPoint Resources	TVD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Site:	Critter Creek 17 SW Pad	North Reference:	True
Well:	Critter Creek 17-6104D	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,500.00	90.00	0.129	7,620.00	1,363.78	983.63	1,365.99	0.00	0.00	0.00
9,600.00	90.00	0.129	7,620.00	1,463.78	983.86	1,465.99	0.00	0.00	0.00
9,700.00	90.00	0.129	7,620.00	1,563.77	984.08	1,565.99	0.00	0.00	0.00
9,800.00	90.00	0.129	7,620.00	1,663.77	984.31	1,665.99	0.00	0.00	0.00
9,900.00	90.00	0.129	7,620.00	1,763.77	984.53	1,765.99	0.00	0.00	0.00
10,000.00	90.00	0.129	7,620.00	1,863.77	984.76	1,865.99	0.00	0.00	0.00
10,100.00	90.00	0.129	7,620.00	1,963.77	984.98	1,965.99	0.00	0.00	0.00
10,200.00	90.00	0.129	7,620.00	2,063.77	985.21	2,065.99	0.00	0.00	0.00
10,300.00	90.00	0.129	7,620.00	2,163.77	985.43	2,165.99	0.00	0.00	0.00
10,400.00	90.00	0.129	7,620.00	2,263.77	985.66	2,265.99	0.00	0.00	0.00
10,500.00	90.00	0.129	7,620.00	2,363.77	985.88	2,365.99	0.00	0.00	0.00
10,600.00	90.00	0.129	7,620.00	2,463.77	986.10	2,465.99	0.00	0.00	0.00
10,700.00	90.00	0.129	7,620.00	2,563.77	986.33	2,565.99	0.00	0.00	0.00
10,800.00	90.00	0.129	7,620.00	2,663.77	986.55	2,665.99	0.00	0.00	0.00
10,900.00	90.00	0.129	7,620.00	2,763.77	986.78	2,765.99	0.00	0.00	0.00
11,000.00	90.00	0.129	7,620.00	2,863.77	987.00	2,865.99	0.00	0.00	0.00
11,100.00	90.00	0.129	7,620.00	2,963.77	987.23	2,965.99	0.00	0.00	0.00
11,200.00	90.00	0.129	7,620.00	3,063.77	987.45	3,065.99	0.00	0.00	0.00
11,300.00	90.00	0.129	7,620.00	3,163.77	987.68	3,165.99	0.00	0.00	0.00
11,400.00	90.00	0.129	7,620.00	3,263.77	987.90	3,265.99	0.00	0.00	0.00
11,500.00	90.00	0.129	7,620.00	3,363.77	988.13	3,365.99	0.00	0.00	0.00
11,600.00	90.00	0.129	7,620.00	3,463.77	988.35	3,465.99	0.00	0.00	0.00
11,700.00	90.00	0.129	7,620.00	3,563.77	988.58	3,565.99	0.00	0.00	0.00
11,800.00	90.00	0.129	7,620.00	3,663.77	988.80	3,665.99	0.00	0.00	0.00
11,900.00	90.00	0.129	7,620.00	3,763.77	989.03	3,765.99	0.00	0.00	0.00
12,000.00	90.00	0.129	7,620.00	3,863.77	989.25	3,865.99	0.00	0.00	0.00
12,100.00	90.00	0.129	7,620.00	3,963.77	989.48	3,965.99	0.00	0.00	0.00
12,200.00	90.00	0.129	7,620.00	4,063.77	989.70	4,065.99	0.00	0.00	0.00
12,300.00	90.00	0.129	7,620.00	4,163.77	989.92	4,165.99	0.00	0.00	0.00
12,400.00	90.00	0.129	7,620.00	4,263.77	990.15	4,265.99	0.00	0.00	0.00
12,500.00	90.00	0.129	7,620.00	4,363.77	990.37	4,365.99	0.00	0.00	0.00
12,600.00	90.00	0.129	7,620.00	4,463.77	990.60	4,465.99	0.00	0.00	0.00
12,700.00	90.00	0.129	7,620.00	4,563.77	990.82	4,565.99	0.00	0.00	0.00
12,800.00	90.00	0.129	7,620.00	4,663.77	991.05	4,665.99	0.00	0.00	0.00
12,900.00	90.00	0.129	7,620.00	4,763.77	991.27	4,765.99	0.00	0.00	0.00
13,000.00	90.00	0.129	7,620.00	4,863.77	991.50	4,865.99	0.00	0.00	0.00
13,100.00	90.00	0.129	7,620.00	4,963.77	991.72	4,965.99	0.00	0.00	0.00
13,200.00	90.00	0.129	7,620.00	5,063.77	991.95	5,065.99	0.00	0.00	0.00
13,300.00	90.00	0.129	7,620.00	5,163.77	992.17	5,165.99	0.00	0.00	0.00
13,400.00	90.00	0.129	7,620.00	5,263.77	992.40	5,265.99	0.00	0.00	0.00
13,500.00	90.00	0.129	7,620.00	5,363.77	992.62	5,365.99	0.00	0.00	0.00
13,600.00	90.00	0.129	7,620.00	5,463.77	992.85	5,465.99	0.00	0.00	0.00
13,700.00	90.00	0.129	7,620.00	5,563.76	993.07	5,565.99	0.00	0.00	0.00
13,800.00	90.00	0.129	7,620.00	5,663.76	993.30	5,665.99	0.00	0.00	0.00
13,900.00	90.00	0.129	7,620.00	5,763.76	993.52	5,765.99	0.00	0.00	0.00
14,000.00	90.00	0.129	7,620.00	5,863.76	993.74	5,865.99	0.00	0.00	0.00
14,100.00	90.00	0.129	7,620.00	5,963.76	993.97	5,965.99	0.00	0.00	0.00
14,200.00	90.00	0.129	7,620.00	6,063.76	994.19	6,065.99	0.00	0.00	0.00
14,300.00	90.00	0.129	7,620.00	6,163.76	994.42	6,165.99	0.00	0.00	0.00
14,400.00	90.00	0.129	7,620.00	6,263.76	994.64	6,265.99	0.00	0.00	0.00
14,500.00	90.00	0.129	7,620.00	6,363.76	994.87	6,365.99	0.00	0.00	0.00
14,600.00	90.00	0.129	7,620.00	6,463.76	995.09	6,465.99	0.00	0.00	0.00
14,700.00	90.00	0.129	7,620.00	6,563.76	995.32	6,565.99	0.00	0.00	0.00
14,800.00	90.00	0.129	7,620.00	6,663.76	995.54	6,665.99	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 17-6104D
Company:	HighPoint Resources	TVD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Site:	Critter Creek 17 SW Pad	North Reference:	True
Well:	Critter Creek 17-6104D	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
14,900.00	90.00	0.129	7,620.00	6,763.76	995.77	6,765.99	0.00	0.00	0.00
15,000.00	90.00	0.129	7,620.00	6,863.76	995.99	6,865.99	0.00	0.00	0.00
15,100.00	90.00	0.129	7,620.00	6,963.76	996.22	6,965.99	0.00	0.00	0.00
15,200.00	90.00	0.129	7,620.00	7,063.76	996.44	7,065.99	0.00	0.00	0.00
15,300.00	90.00	0.129	7,620.00	7,163.76	996.67	7,165.99	0.00	0.00	0.00
15,400.00	90.00	0.129	7,620.00	7,263.76	996.89	7,265.99	0.00	0.00	0.00
15,500.00	90.00	0.129	7,620.00	7,363.76	997.12	7,365.99	0.00	0.00	0.00
15,600.00	90.00	0.129	7,620.00	7,463.76	997.34	7,465.99	0.00	0.00	0.00
15,700.00	90.00	0.129	7,620.00	7,563.76	997.56	7,565.99	0.00	0.00	0.00
15,800.00	90.00	0.129	7,620.00	7,663.76	997.79	7,665.99	0.00	0.00	0.00
15,900.00	90.00	0.129	7,620.00	7,763.76	998.01	7,765.99	0.00	0.00	0.00
16,000.00	90.00	0.129	7,620.00	7,863.76	998.24	7,865.99	0.00	0.00	0.00
16,100.00	90.00	0.129	7,620.00	7,963.76	998.46	7,965.99	0.00	0.00	0.00
16,200.00	90.00	0.129	7,620.00	8,063.76	998.69	8,065.99	0.00	0.00	0.00
16,300.00	90.00	0.129	7,620.00	8,163.76	998.91	8,165.99	0.00	0.00	0.00
16,400.00	90.00	0.129	7,620.00	8,263.76	999.14	8,265.99	0.00	0.00	0.00
16,500.00	90.00	0.129	7,620.00	8,363.76	999.36	8,365.99	0.00	0.00	0.00
16,600.00	90.00	0.129	7,620.00	8,463.76	999.59	8,465.99	0.00	0.00	0.00
16,700.00	90.00	0.129	7,620.00	8,563.76	999.81	8,565.99	0.00	0.00	0.00
16,800.00	90.00	0.129	7,620.00	8,663.76	1,000.04	8,665.99	0.00	0.00	0.00
16,900.00	90.00	0.129	7,620.00	8,763.76	1,000.26	8,765.99	0.00	0.00	0.00
17,000.00	90.00	0.129	7,620.00	8,863.76	1,000.49	8,865.99	0.00	0.00	0.00
17,100.00	90.00	0.129	7,620.00	8,963.76	1,000.71	8,965.99	0.00	0.00	0.00
17,200.00	90.00	0.129	7,620.00	9,063.76	1,000.94	9,065.99	0.00	0.00	0.00
17,300.00	90.00	0.129	7,620.00	9,163.76	1,001.16	9,165.99	0.00	0.00	0.00
17,400.00	90.00	0.129	7,620.00	9,263.76	1,001.38	9,265.99	0.00	0.00	0.00
17,500.00	90.00	0.129	7,620.00	9,363.76	1,001.61	9,365.99	0.00	0.00	0.00
17,600.00	90.00	0.129	7,620.00	9,463.76	1,001.83	9,465.99	0.00	0.00	0.00
17,700.00	90.00	0.129	7,620.00	9,563.75	1,002.06	9,565.99	0.00	0.00	0.00
17,800.00	90.00	0.129	7,620.00	9,663.75	1,002.28	9,665.99	0.00	0.00	0.00
17,900.00	90.00	0.129	7,620.00	9,763.75	1,002.51	9,765.99	0.00	0.00	0.00
18,000.00	90.00	0.129	7,620.00	9,863.75	1,002.73	9,865.99	0.00	0.00	0.00
18,100.00	90.00	0.129	7,620.00	9,963.75	1,002.96	9,965.99	0.00	0.00	0.00
18,192.85	90.00	0.129	7,620.00	10,056.60	1,003.17	10,058.84	0.00	0.00	0.00
TD at 18192.85									
18,192.86	90.00	0.129	7,620.00	10,056.61	1,003.17	10,058.84	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Critter Creek 17-6104D I	0.00	0.000	7,620.00	30.64	980.64	1,578,200.59	3,287,621.69	40° 54' 57.226 N	104° 27' 33.631 W
- plan hits target center									
- Point									
Critter Creek 17-6104D I	0.00	0.000	7,620.00	10,056.61	1,003.17	1,588,226.11	3,287,526.96	40° 56' 36.287 N	104° 27' 33.332 W
- plan hits target center									
- Point									

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 17-6104D
Company:	HighPoint Resources	TVD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5321.9' & KB 20' @ 5341.90ft
Site:	Critter Creek 17 SW Pad	North Reference:	True
Well:	Critter Creek 17-6104D	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00
2,557.85	2,482.20	-200.19	361.51	Start 300.10 hold at 2557.85 MD
2,857.95	2,739.01	-275.41	497.34	Start Drop -1.50
4,935.08	4,715.27	-542.33	979.35	Start 2331.77 hold at 4935.08 MD
7,266.85	7,047.04	-542.33	979.35	Start DLS 10.00 TFO 0.13
8,166.85	7,620.00	30.63	980.64	Start 10026.00 hold at 8166.85 MD
18,192.85	7,620.00	10,056.60	1,003.17	TD at 18192.85